



# **Wild Turkey**

## **Ecology and Management in Wisconsin**

John F. Kubisiak, Robert E. Rolley, R. Neal Paisley, and Robert G. Wright

Wisconsin Department of Natural Resources  
2001

*Cover photo: Michael R. Johnson*

*The Wisconsin Department of Natural Resources provides equal opportunity in its employment, programs, services, and functions under an Affirmative Action Plan. If you have any questions, please write to Equal Opportunity Office, Department of Interior, Washington, D.C. 20240.*

*This publication is available in alternative format (large print, Braille, audio tape, etc.) upon request. Please call Wisconsin Department of Natural Resources, Bureau of Integrated Science Services, at 608-266-0531 for more information.*



# WILD TURKEY ECOLOGY AND MANAGEMENT IN WISCONSIN

John F. Kubisiak, Robert E. Rolley,  
R. Neal Paisley, and Robert G. Wright



MICHAEL JOHNSON

**Wisconsin Department of Natural Resources**


Bureau of Integrated Science Services  
PO Box 7921, Madison, WI 53707

2001





# CONTENTS

<b>HISTORY OF WILD TURKEYS IN WISCONSIN</b> . . . . .	1
Historic Restocking Efforts . . . . .	1
Recent Restoration Activities . . . . .	3
 Establishment of Wild Turkeys in Turkey Hunting Zone 4 . . . . .	4
 Wild Turkey Hunting Zones . . . . .	6
Current Distribution of Wild Turkeys . . . . .	7
 Counting Wild Turkeys from Helicopters . . . . .	8
<b>HABITAT REQUIREMENTS</b> . . . . .	9
Foods . . . . .	9
Roosting Habitat . . . . .	10
Nesting and Brood-Rearing Habitat . . . . .	10
 Wild Turkey Home Range . . . . .	11
Geographic Differences in Climate and Habitat Suitability . . . . .	12
Summary of Key Habitat Ingredients . . . . .	14
<b>WILD TURKEYS AND AGRICULTURE</b> . . . . .	15
Habitat Use by Hens During Summer and Fall . . . . .	15
 Radiotelemetry . . . . .	16
Use of Agricultural Crops by Turkeys . . . . .	16
<i>Spring</i> . . . . .	18
<i>Summer</i> . . . . .	18
<i>Fall</i> . . . . .	18
What Was the Bottom Line on Agricultural Damage? . . . . .	19

 Wild turkey icons indicate sections covering related topics.





<b>WILD TURKEY POPULATION DYNAMICS</b>	20
 Wild Turkey Dispersal	20
<b>Survival</b>	20
<i>Hens</i>	20
<i>Gobblers</i>	20
<b>Winter Survival</b>	21
 Long-lived Turkeys	22
<b>Causes of Mortality</b>	22
<i>Hens</i>	22
<i>Gobblers</i>	23
<b>Reproduction</b>	24
Turkey Population Trends in Vernon County	25
Modeling the Effects of Reproduction and Survival Changes	26
Lessons Learned about Wild Turkey Populations	27
<b>MANAGING THE HUNT</b>	28
Monitoring Population Status	28
Hunting Seasons and Harvests	32
<i>Spring Hunt</i>	32
<i>Fall Hunt</i>	34
Sociological Studies of Turkey Hunters	37
<i>Profile of Turkey Hunters in Southwestern Wisconsin</i>	37
<i>Hunter Perceptions of Turkey Hunting Throughout Southern Wisconsin</i>	37
<i>Effect of Hunter Density on Hunter Perceptions of Turkey Hunting</i>	38
<i>Effect of Hunter Density on Landowner Perceptions of Turkey Hunting</i>	39
Turkey Hunting Safety	40
Law Enforcement	40
<b>FUTURE PROSPECTS FOR WILD TURKEYS IN WISCONSIN</b>	41
<b>SUGGESTED READING</b>	43



**W**isconsin's native population of eastern wild turkeys (*Meleagris gallopavo silvestris*) was extirpated in the late 1800s. Restoration attempts in the 1930s and 1950s essentially failed. The restoration that began in 1976 was a dramatic success, however, adding another chapter to Wisconsin's successful wildlife management program.

*This booklet reviews wild turkey ecology, management, and research in Wisconsin, and includes a summary of the resulting technical articles. The research, mostly done between 1988 and 1993 in southwestern Wisconsin, added much to our understanding of turkey ecology, turkey impacts on agricultural crops, and hunter and landowner perceptions of turkey hunting. As a result, we better understand turkey distribution and abundance statewide, and the impact on abundance of harvest and such environmental factors as winter and spring weather, the composition and distribution of various forest types, and the distribution of dairy agriculture. This knowledge makes it possible to manage the wild turkey resource more effectively. As a result, wildlife managers now have the tools they need to regulate hunter numbers and harvest.*

*Wisconsin's wild turkey management program owes its success to the efforts of Wisconsin Department of Natural Resources (DNR) wildlife personnel and cooperating landowners. License and stamp fees paid by turkey hunters supplied vital financial support. Other revenue came from an excise tax on sporting arms and ammunition under the federal Pittman-Robertson program. In addition, the turkey resource and many other wildlife species have benefited from generous support by the National Wild Turkey Federation (NWTF), the Wisconsin Chapter of the NWTF, and its corps of dedicated volunteers.*

